

A B S T R A C T

GAS TURBINE VENTILATION CIRCUITRY

5 The invention relates to the ventilation circuits of
a turbomachine turbine rotor (1) having a turbine disk
(3) and an upstream flange (5) that is disposed upstream
from a combustion chamber from which it is spaced apart
by a cavity (12). A first cooling air circuit delivers
10 air into the cavity (12) via main injectors (15) and via
holes made in the flange (5). A second cooling air
circuit delivers air through the enclosures that are
delimited by the inner casing of the combustion chamber
and the rotor via a discharge labyrinth, an under-
15 injector labyrinth, and at least one labyrinth disposed
downstream from the main injectors between an annular
structure (27) and the flange (5). According to the
invention, three single-wiper labyrinths are provided
(31, 32, 33) downstream from the main injectors, said
20 labyrinths delimiting two cavities (34, 35) upstream from
the venting cavity (20) of the turbine disk (3). One of
the cavities (34, 35) is fed with air coming from the
second circuit upstream from the under-injector labyrinth
by bore holes (38) sloping tangentially in the direction
25 of rotation of the rotor and made in the annular
structure (27).

30

Translation of the title and the abstract as they were when originally filed by the
35 Applicant. No account has been taken of any changes that may have been made
subsequently by the PCT Authorities acting ex officio, e.g. under PCT Rules 37.2,
38.2, and/or 48.3.